



Damselfs in Distress

Damselfs vs. Dragons:

Damselflies and dragonflies are a type of insect called an odonate. Damselflies resemble dragonflies though they are smaller, more slender, and have rectangular rather than round heads. You can easily tell the difference between a damselfly and a dragonfly by the way they perch. Damselflies hold their wings closed above their body when at rest while dragonflies rest with their wings open.



Beautiful Hawaiian damselflies (*Megalagrion calliphya*) perching with closed wings

Featuring the Orangeblack Hawaiian Damselfly

(*Megalagrion xanthomelas*):

Adults of this smaller species have a wingspan of 1.4-1.6 inches.

The male's head is black with large red eyes. The body (called the thorax) is striped red and black with red legs. The abdomen (the long tail-like appendage) is mostly black with a few red markings. Females have a similar coloration pattern though they are tan and black instead of red and black.

Habitat & Diet: This is a lowland species that tends to fly amid the vegetation bordering anchialine pools, coastal wetlands, and slow moving sections of streams. They catch and eat small insects out of the air by forming a basket with their spiny legs. They

can also act as an ambush predator, watching patiently from a perch then pouncing on their prey.

A male orangeblack Hawaiian damselfly waiting in ambush?

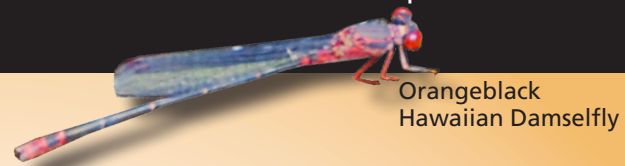


They have been known to prey on insects larger than themselves and even other damselflies if the opportunity presents itself.

Reproduction: Small, cigar-shaped eggs are deposited into the tissues of lily pads and other aquatic plants. Ten to twenty days later, the eggs hatch. The immature damselfly larvae live in the water under submerged vegetation, and use gills to breathe underwater. They periodically molt (shed their outer skin or exoskeleton) over several months until they become fully mature adults. When they mature, they crawl out of the water onto vegetation or rocks and molt one last time into a winged adults.

Tidbit: Adult damselflies will “play dead” as a defensive behavior if caught in a net. They will draw their legs up under their bodies and lie completely still for several seconds, until they spring to life and fly away.

Threats: Orangeblack Hawaiian damselflies are endemic to Hawaii. This means they occur nowhere else in the world. Historically, this species was one of the most abundant Hawaiian damselflies in the islands with the ability to breed in a wide variety of aquatic habitats. Since the 1970s, there has been a marked decrease in the population.



Orangeblack
Hawaiian Damselfly

Specifically, the human use and alteration of streams and groundwater has played a significant role in the loss of suitable habitat. Habitat loss and degradation of coastal water sources has led to the listing of the orangeblack Hawaiian damselfly as a [candidate endangered species](#).

This species is also threatened by introduced species, particularly invasive plants (such as *Brachiaria mutica*) that form dense thickets which effectively eliminate access to open water. Invasive fish and shrimp also prey on damselfly larvae.

In National Parks: Once present on all the main Hawaiian Islands, these insects are no longer found on Kaua'i. Localized populations have been recorded on O'ahu, Maui, Moloka'i, Lana'i, and Hawai'i Island. You may spot them around anchialine pools in Pu'uuhonua o Hōnaunau National Historical Park (PUHO) and Kaloko-Honokōhau National Historical Park (KAHO). These sometimes cryptic damselflies have also been recorded near the mouth of Waikolu Stream in Kalaupapa National Historical Park.

Most active during periods of full sunlight, orangeblack Hawaiian damselflies usually hide in vegetation on cloudy days. The Pacific Island Network Inventory & Monitoring Program monitors populations of these and other odonates that reside around anchialine pools in west Hawai'i national parks.

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For more info: <http://www.xerces.org/orangeblack-hawaiian-damselfly/>